R3G250-AK29-81

EC centrifugal fan

backward-curved, single-intake

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Nominal data

Type	**R3G250-AK29-81**
Motor	**M3G084-DF**

Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	3050
Power consumption	W	337
Current draw	A	3.9
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

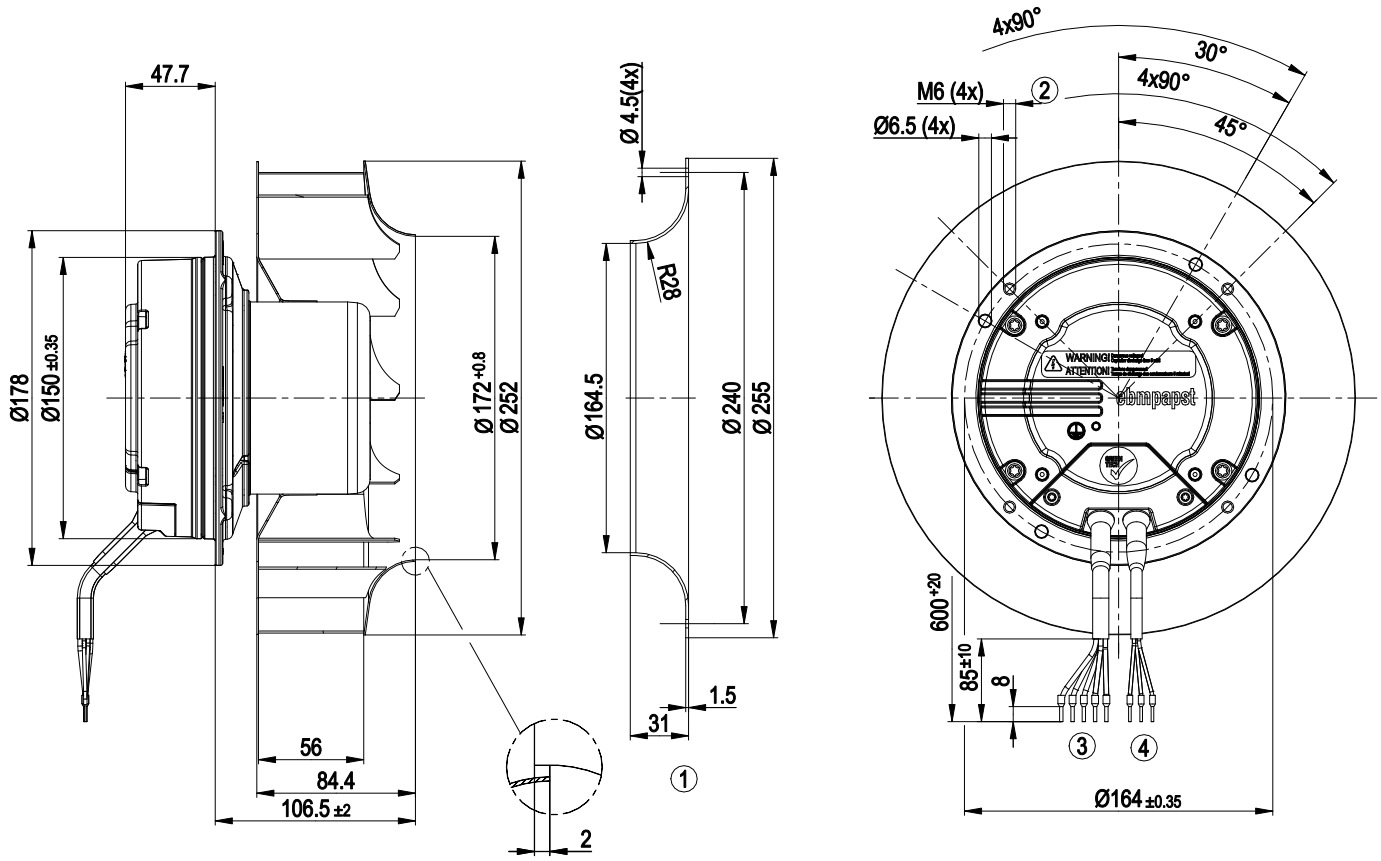
Weight	4.6 kg
Fan size	250 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, galvanized
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from supply - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1
Approval	CCC; EAC; UL 2111; CSA C22.2 No. 77

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Product drawing



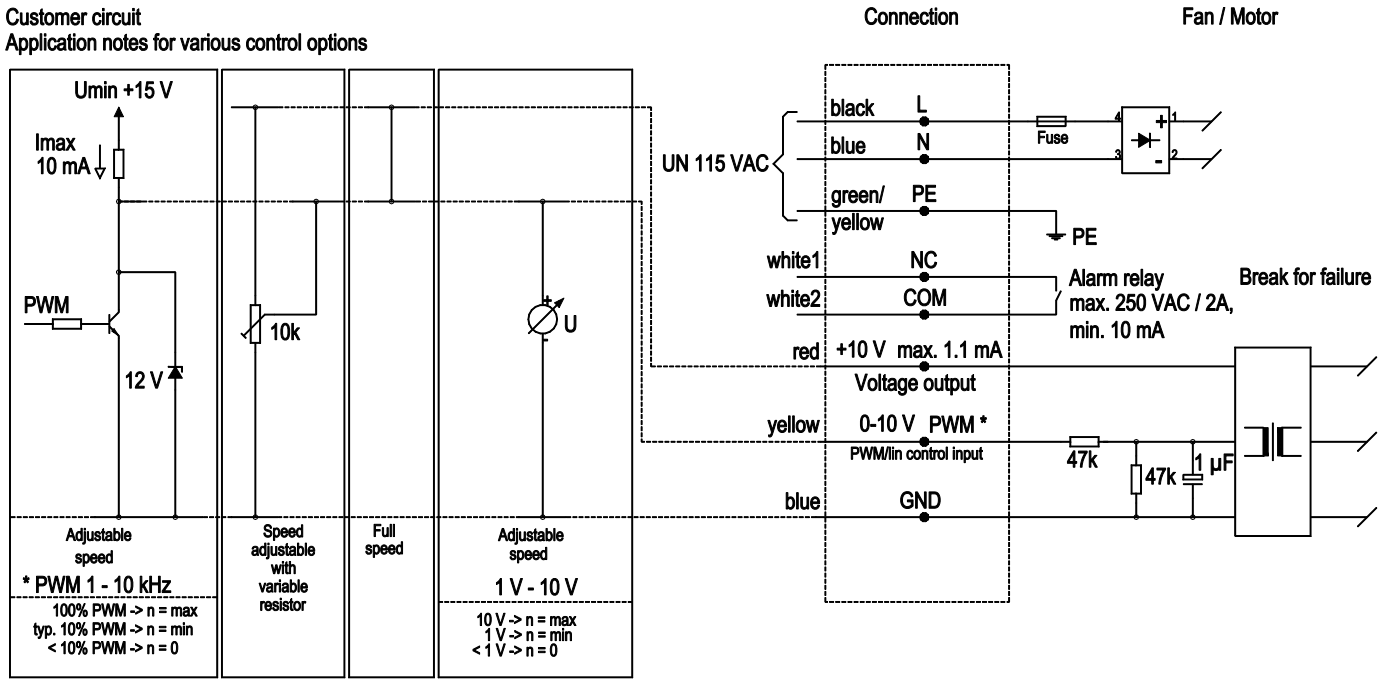
1	Accessory part: Inlet ring 96359-2-4013, not included in scope of delivery
2	Clearance for screw 8-10 mm
3	Cable PVC AWG18, 5x crimped ferrules
4	Cable PVC AWG22, 3x crimped ferrules

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Connection diagram

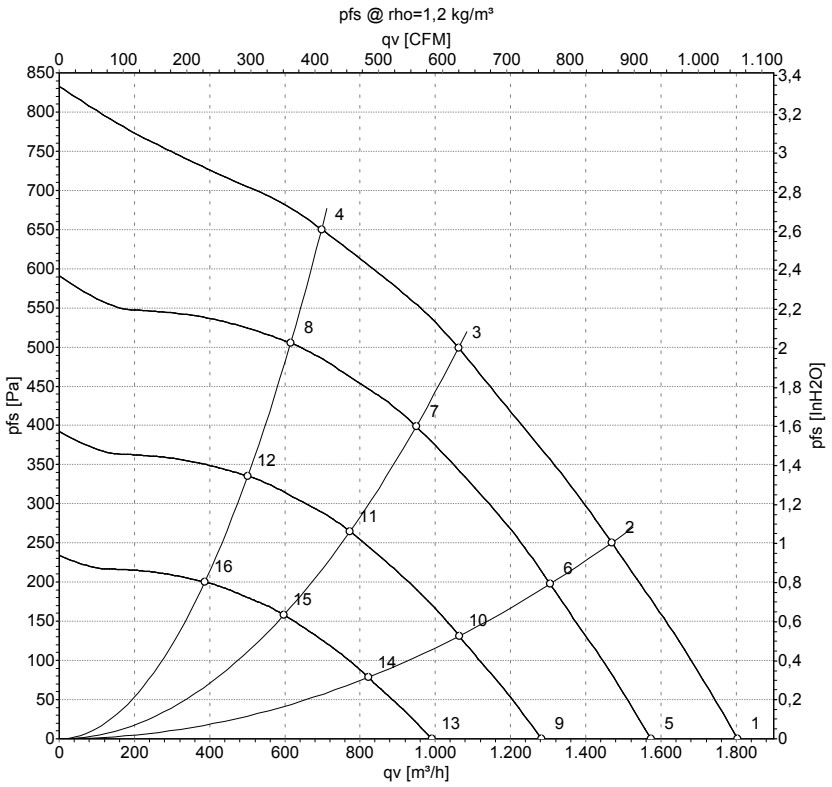


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Curves: Air performance 50 Hz



Measurement: LU-78280-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	f	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	115	50	3095	272	3.20	1805	0	1060	0.00
2	115	50	3050	316	3.68	1470	250	865	1.00
3	115	50	3050	337	3.90	1060	500	625	2.01
4	115	50	3060	308	3.59	700	650	410	2.61
5	115	50	2700	180	2.13	1575	0	925	0.00
6	115	50	2700	221	2.58	1305	197	770	0.79
7	115	50	2700	239	2.77	950	399	560	1.60
8	115	50	2700	211	2.46	615	505	360	2.03
9	115	50	2200	97	1.15	1280	0	755	0.00
10	115	50	2200	120	1.40	1065	131	625	0.53
11	115	50	2200	129	1.50	775	265	455	1.06
12	115	50	2200	114	1.33	500	335	295	1.34
13	115	50	1700	45	0.53	990	0	585	0.00
14	115	50	1700	55	0.64	820	78	485	0.31
15	115	50	1700	60	0.69	600	158	350	0.63
16	115	50	1700	53	0.61	385	200	230	0.80

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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